

# AIRPOWER IN THE MISSILE GAP

By JAMES E. KING, JR.

Bernard Brodie, *Strategy in the Missile Age*, Princeton, N.J., Princeton University Press, 1959, 423 pp. \$6.50.

N EARLY five years ago, in an article in *Harper's Magazine*, Bernard Brodie of The RAND Corporation said: "The old concepts of strategy, including those of Douhet and of World War II, have come to a dead end. What we now must initiate is the comprehensive pursuit of the new ideas and procedures necessary to carry us through the next two or three dangerous decades."<sup>1</sup> Now, in *Strategy in the Missile Age*—a book of great achievement—Brodie reviews his judgment on the classic writers on modern strategy, and concludes that, in general, airpower armed with thermonuclear weapons has made a hash of their theories. To be sure, Clausewitz's dictum on the senselessness of war for its own sake is still persuasive, but, with one exception, he alone among the old masters still has something to say to us. The exception is Douhet, who comes out rather better than he did in 1955. For—wrong as he was on nearly every count in his own day—Douhet "has come into his own" (p. 402), thanks to nuclear weapons, of which he had no inkling when he wrote.

In essence, Brodie says, it is “*the loss of the defensive function as an inherent capability of our major offensive forces*” (p. 225; author’s italics) that accounts for the eclipse of strategy as it used to be understood. In carrying out their offensive mission, these forces do not “interpose themselves between enemy and homeland, as armies did and still do wherever the chief burden of fighting is theirs” (*ibid.*). Active anti-air defenses over our homeland have their uses—“there is a rough rule-of-thumb principle that no enemy vehicle of attack must be permitted to have ‘a free ride’”—but “history . . . thus far suggests that there is always a hole, an Achilles’ heel” (p. 202). Therefore, in principle, “barring revolutionary and presently unforeseen advances in air defense, including extensive hardening of targets, an unrestricted strategic air campaign . . . is bound to be decisive” (p. 165).

As Douhet and the USAF say: the bomber will always get through—and now there are missiles. Passive defensive measures, including that “hardening of targets” just alluded to, deserve more attention than they have received, because they improve our ability to “take it” if an attack

<sup>1</sup> "Strategy Hits a Dead End," *Harper's Magazine* (October 1955), p. 37.

is launched against force," the only kind of counterair or blunting action on our having to do. It is not the only reason, least likely to be met, preventive war (Brookings action, the so-called "most other critics who —for the United States is ruled out by practical considerations.

It is hardly surprising that the United States is haunted throughout its history by the specter of preventive war. That he personally, and other grounds, is the choice of preventive war is an Albatross to his strategy of hitting back in broader *political* terms. It is not to have difficulty considering a preventive war solution, and we must now propose a strategy, including both. On the weapons side, not as yet been paid in the form of our strategic retaliatory capability. A retaliatory force constitutes a potentially a conspicuous inability or unwillingness to provoke the opponent to an aggression.

Of even greater interest as regards the "basic attack" to Brodie, requires forthrightly (the title of Chapter 7, "Pre-emptive" attack) and, last, to the author, some



is launched against us. But as for SAC, which is "our major offensive force," the only kind of "defensive" action of which it is capable is a counterair or blunting mission," which depends for its success "essentially on our having the initiative, more specifically, *on our hitting first*. It is not the only requirement, but it is the basic one. It is also the one least likely to be met" (p. 225; italics added). For hitting first means preventive war (Brodie doesn't find the paler version of preventive action, the so-called "pre-emptive strike," any more convincing than do most other critics who have examined it). But—and this is the clincher—*for the United States, though not for the Soviet Union*, preventive war is ruled out by practical (political and constitutional) as well as moral considerations.

It is hardly surprising, in view of these premises, that Brodie's argument is haunted throughout by the conviction that the offensive strategy of preventive war is the best *military* strategy for *both* the great nuclear powers. That he personally rejects the policy of preventive war, on moral and other grounds, is evident and noteworthy. Nevertheless the fact that the choice of preventive war is foreclosed to us but not to our adversary is an Albatross to his own strategic thinking. The alternative military strategy of hitting *back*, though required by our strategy conceived in broader *political* terms, is so second-rate militarily that Brodie seems to have difficulty considering it a rational choice at all. It is this second-rate strategy that he calls "deterrence," of which he says: "the rejection of a preventive war solution has committed us to a deterrence strategy, and we must now prove ourselves ready to pay the full price of such a strategy, including basic adjustment in military doctrine" (p. 176).

On the weapons side, the price of the deterrence strategy that has not as yet been paid in full (there being no suggestion that the destructive power of our strategic forces is inadequate) is the protection of our retaliatory capability. For whereas "Known ability to defend our retaliatory force constitutes the only unilaterally attainable situation that provides potentially a perfect defense of our homeland . . . , a conspicuous inability or unreadiness to defend our retaliatory force must tend to provoke the opponent to destroy it; in other words, it tempts him to an aggression he might not otherwise contemplate" (p. 185).

Of even greater interest to the student of strategy is the "full price" as regards the "basic adjustment in military doctrine." This, according to Brodie, requires forthright rejection of "the wish for total solutions" (the title of Chapter 7, pp. 223-63), including not only preventive war and "pre-emptive" attack, but, in particular, "massive retaliation." The last, to the author, sounds like double-talk for preventive war—"save



that we have waited for an excuse, a provocation" (p. 257). Anyway, he suspects the famous doctrine is more pose than policy, for while the occasion for it was the threat of local aggression with conventional land forces in the Far East, "no responsible government will opt for massive retaliation except where it conceives its stake in the matter to be absolutely vital" (p. 259).

The argument is aimed primarily at airpower enthusiasts who have "followed Douhet, not merely in . . . broad emphasis on strategic bombing, but also through most of the finer ramifications of his philosophy" (p. 74), ignoring the obvious incompatibility of that philosophy with the basic rejection of preventive war. It is this "offensive-mindedness," this preoccupation with "seizing the initiative and carrying the fight to the enemy," even to the point of addiction to "the ritual of liquidation—the idea that some convulsive and fearfully costly act will justify itself through the elimination of the evil enemy and the need to live in the same world with him" (p. 268), that the author believes has led to the vulnerability of SAC and to partiality for strike-first doctrines such as "massive retaliation," "pre-emptive" strikes, and even preventive war itself.

Nevertheless, the rejection of strike-first doctrines is not quite as definitive as appears in the passages from which the quotations in the last two paragraphs have been selected. For elsewhere the point is made that "we have and will probably continue to have obligations under treaties of alliance which require us to defend our partners with all the resources at our command from nuclear attack." Because of these treaty obligations (and for "other reasons"), the author says, "we need the capability for a first strike, both in spirit and in military power" (p. 270). The paradox of rejecting preventive war while simultaneously being preoccupied with the strike-first counterforce capability of our strategic forces is not, then, entirely the product of enthusiasm for "total solutions." Indeed, it is inherent in the foreign policies the United States government has built upon nuclear airpower and, as such, Bernard Brodie recognizes its inevitability, albeit rather grudgingly.

He seeks relief from the discomfort of excessive reliance upon the first-strike threat by directing attention to a "strategy of limited war," which he treats as a supplement to the main-line strategy of deterrence. For, as he says: "The fact is that if the enemy in his aggressions, especially those outside Europe, leaves to us the choice between fighting a total war or fighting a limited one, the chances are overwhelming that our government will opt for the limited one" (p. 259). And even in the critical case of Europe, "we ought to be interested in developing a

real NATO limited uncomfortable strategy, if not by the limited war today rather than the non-use of *strictly military power* (author's italics). The (to observe) limited stances would not be wars "can have little getting worse. Then of either the Soviet through wars that term" (p. 409).

Loss of the defense the overwhelming as the initiative the best elected victim as well the best strategy, he entails trying to be successful calls for major effort under surprise attack retaliate is to be credited tending to embrace m upon his taking the initiative to take the initiative in present purpose to prevent nuclear weapons in the atomic weapons there one that ought not be taking it away, if we are

This, in brief, is Brodie's day. It will not be surprising that we are still at the military "best strategy" of deterrence. The able in the presence of a country when its military will desire to probe deeper for Brodie's appraisal is (by rejecting his passive



real NATO limited war capability" (p. 337). However, this too is an uncomfortable strategic choice, forced upon us by the logic of airpower, if not by the illogic of our rejection of preventive war. For limited war today raises an entirely unprecedented problem: the "deliberate non-use of . . . *just those existing instruments which from a strictly military point of view are far the most efficient . . .*" (p. 311; author's italics). Thus because (as Hans Speier may have been the first to observe) limited war is "inefficient war," war in current circumstances would not be easy to limit. And anyway, says Brodie, limited wars "can have little more than the function of keeping the world from getting worse. There is little chance that the basic inherent strength of either the Soviet Union or Communist China can be drained off through wars that are kept limited in any meaningful sense of the term" (p. 409).

Loss of the defensive function of the dominant arm, together with the overwhelming advantage of the first strike, then, make seizure of the initiative the best strategy in Great Power conflict—for the aggressor's elected victim as well as for the aggressor. If the former cannot choose the best strategy, he must be content with the second-best strategy that entails trying to be sure he can strike back in order to deter attack. This calls for major effort to ensure the protection of his strategic forces under surprise attack, for they must be able to survive if his threat to retaliate is to be credible. Meanwhile, he is wise to be cautious, not pretending to embrace military doctrines that depend for their effectiveness upon his taking the initiative, for to do so without actually being free to take the initiative is likely to provoke the very attack it is his deterrent purpose to prevent. By the same token he had best not rely upon nuclear weapons in limited wars, for "between the use and non-use of atomic weapons there is a vast watershed of difference and distinction, one that ought not be cavalierly thrown away, as we appear to be throwing it away, if we are serious about trying to limit war" (p. 327).

This, in brief, is Bernard Brodie's appraisal of military strategy today. It will not be surprising if some of his readers are convinced by it that we are still at a dead end—in the contradiction between the military "best strategy" of preventive war and the political "best strategy" of deterrence. Those who dislike dead ends, who are uncomfortable in the presence of contradiction, or who fear for the safety of the country when its military thinking seems at war with its world outlook, will desire to probe deeper or look farther ahead. And well they may, for Brodie's appraisal is Douhet updated (by adding H-bombs), purged (by rejecting his passion for aggressive total war), and perturbed (by



the intrusion of strategic missiles that do not fit the airpower pattern). It is thus an analysis of airpower in the Missile Gap: the period during which our bombers are imperiled by Russian missiles while our own missile force is still considered inadequate to the task of deterrence.

The Missile Gap, however, is a temporary phenomenon. Almost certainly it will not be longer than five years before the Missile Age will be in full dominion, with the strategic missile the dominant weapon, the manned bomber dethroned, and the Air Age history. Brodie's own glances in that direction are cautious and inconclusive; it is not his subject. But he has written what deserves to be regarded as the definitive work on the strategic alternatives of the Air Age and his analysis affords us a useful foundation from which to approach the Missile Age. Perhaps by adapting his method to the speculation he has chosen to avoid we may utilize it to crack the door to the future, as he has used it to open the past and present to better understanding.

We begin our search by asking a question: What is the premise upon which the strategy of nuclear airpower has been built? We need not enumerate all the well-known negatives—the decline of the defensive function, the eclipse of the other arms, etc. These are not premises; they are inferences that come later. But the base premise itself is no mystery. It is simply this: strategic airpower using nuclear weapons can achieve victory by destroying the enemy's airpower before the latter can do unacceptable damage to the home country. A suitable short title for this proposition is the phrase, the dominance of the offensive. Even Douhet, who asserted this premise before World War II, insisted that the future victor must launch an all-out surprise attack to make the premise true. The experience of World War II proved, as Brodie shows, that in terms of pre-nuclear airpower Douhet's premise was false, or possibly just irrelevant. But nuclear weapons have rehabilitated it, with redoubled emphasis upon the decisiveness of the initiative. This is Brodie's restatement: "Today the supreme advantage of the initiative in launching an unrestricted thermonuclear war can hardly be contested, for the side possessing it can hope, reasonably under some circumstances, to obliterate the opponent's power to retaliate" (p. 176).

It is obvious, however, that the Douhet proposition, though it is the foundation upon which airpower strategy for the nuclear era has been built, is really not a premise, but a conclusion. A number of assumptions are hidden in it, including two that are of critical importance, namely, that *the attacker knows where the enemy strategic force is located*, and that *he can destroy it by surprise attack before it can be launched into an attack upon his homeland* (more precisely, that he can destroy



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enough of it so that the damage the remainder can do to his homeland is acceptable to him). If either of these hidden assumptions is false, the Douhet premise itself is false, and the rational justification of a surprise attack (which causes Brodie so much trouble) is lacking.

Neither of the two hidden assumptions is self-evident. In fact, the requirements to be satisfied if they are to be true are quite exacting. After all, they relate to targets located within enemy territory, thousands of miles from the forces that are destined to attack them—targets, moreover, that can be attacked only after hours of flight, during which time the victim of the attack is virtually certain to receive some warning (and may have several hours in which to launch his counterattack), while the attacking bombers must run the gantlet of their victim's anti-air defenses. All this suggests another question, more elemental than that asked a moment ago: What is it that warrants the assumptions that the location of these airpower targets is known and that they can be destroyed in a surprise attack? *It is the fact that strategic bombers must normally spend all but a small fraction of their time upon bases difficult if not impossible to hide because of their size, and few in number because of their cost and the requirements of effective control, which, owing to the assumed unreliability of their active defenses, are believed to be highly vulnerable to nuclear attack.* It is the dependence of strategic airpower upon a comparatively few bases which are believed to be indefensible, the locations of which may be known in advance or, if not, may be found by "armed reconnaissance," that is believed to ensure a surprise attack by nuclear airpower a good chance of success.

It is important to interpret these conditions correctly. Brodie lists three "characteristics of an air force," the first two of which correspond to the rehabilitated Douhet premise. His third is different, and may seem to qualify the premise, for he says it appears that the "natural vulnerability" of a strategic air force "can be critically if not decisively reduced by [passive as well as active defensive] measures that seem to be of reasonable cost" (p. 222). What he means, other than that he is lecturing SAC for persisting in its "offensive-mindedness" in the face of the missile threat, is unfortunately not clear. In a few passages he seems to suggest that what he means by "reasonable cost" is negligible cost (e.g., p. 394). But from what he says in other places one might conclude that the cost of protection for our bombers in the Missile Gap would be "reasonable" even if the price were a considerable loss in first-strike offensive capability (e.g., p. 283). If the latter is a fair interpretation, it seems to reflect the price of continuing to rely predominantly upon bombers after missiles have entered the picture, and to



suggest that the third "characteristic of an air force" is a recent discovery.

Brodie argues that "hardening" a portion of SAC's bombers—i.e., their protection with reinforced concrete—is a better solution of the problem of their vulnerability to missile attack than an airborne alert. In this he may be correct, though one notes his bearishness on the accuracy of ICBM's, and would require more information than he supplies about the costs and construction times of his bomber bunkers before one could be wholly convinced. But he seems to be overstating his case if he also means to suggest that the Douhet influence, or general "offensive-mindedness," entirely explains past (i.e., pre-missile) neglect of passive measures to protect SAC.

On the contrary, it appears that General Curtis E. LeMay's choice, when he was SAC commander, which was to meet the Soviet *bomber* threat by building more United States bombers (though LeMay probably overstated *his* case, too), was in full consonance with the base premise of airpower strategy. It is not difficult to understand why a strategic air force commander, if he must choose between a force limited in numbers by the cost and time required to protect his bombers and a larger unprotected force, would be likely to choose the latter. For if he were to opt for hardening while his opponent did not, he would expect the latter to forge ahead in bomber strength. Consequently, he must have confidence in his hardening quite inconsistent with his convictions regarding "the dominance of the offensive" if any appreciable sacrifice of numbers for protection were not to seem to him tantamount to deliberate surrender to his opponent any time the latter chose to take the initiative. What recommended itself to General LeMay instead was that he increase his bomber force, in order that its depleted strength, even after a surprise attack, would still be sufficient to penetrate the enemy's anti-air defenses. This was keeping the emphasis on the offensive, where he was convinced it belonged.

Probably both "offensive-mindedness," which Brodie views with such disfavor, and the thought that SAC might actually be called upon to strike first to carry out United States treaty commitments, which he regards with reluctance as an inescapable component of his "deterrence strategy" (p. 277), helped to reinforce the preference for numbers over protection. But what needs to be emphasized here is that there was a strictly rational basis for the preference, reflecting the character of nuclear airpower and consistent with "the dominance of the offensive." This does not mean, of course, that it was sensible to have no passive protection for SAC (or to confine it to limited dispersal), any more

than it meant, however, or at the highest price, to incur the cost in vulnerability.

Turning to the fact that to rule out the premise of inherent vulnerability has been one of the missile's time in mind because of its adaptable to these deployment, a complex that makes the attacker's possible, uncomfortable, larger number of heads for destruction; some if not impossible beneath the launchers. (But it is likely it is possible missile (the missiles deployed substantial)

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than it means there was no proper role for active defenses. It does mean, however, once we grant the base premise of nuclear airpower, that the highest priority rationally lies in offensive strength, even at considerable cost in vulnerability of the offensive force to attack.

Turning now to the Missile Age, almost the first thing we notice is the fact that the very character of the new dominant weapons appears to rule out the possibility of a missile power equivalent of the base premise of nuclear airpower. To be sure, the strategic missile itself is inherently as vulnerable as the bomber. But unlike the latter, which has been overtaken by a new development for which it was unprepared, the missile is being introduced into an environment in which warning time in minutes is taken for granted. Even more important, the missile, because of its vertical take-off and other performance characteristics, is adaptable to a variety of deployments. In particular, in a number of these deployments the missile need not be tied to a vast soft-base complex that makes a good target for surprise attack. In consequence the attacker's priority targets of the future will no longer be a few immovable, unconcealable, and vulnerable bases. Instead, there will be a far larger number of targets, mostly missiles variously deployed. Some will be in hardened sites underground, requiring high accuracy and big warheads for successful attack even if the attacker knows their precise location; some will be moving over the surface of the earth or sea, difficult if not impossible to keep track of at all times; some will be roaming beneath the surface of the sea; some may be riding in airborne missile launchers. Of course some of the targets may well be manned aircraft. But it is likely that these aircraft will be few by current standards, and it is possible they may be as thoroughly bunkered as any "hardened" missile (though the fact that the bulk of the retaliation force will be in missiles deployed to diminish their vulnerability may give these planes substantial protection even if they remain on exposed bases).

For these reasons, at least as far as we can see now, the strategic nuclear force based predominantly on missiles is likely to be distinctly underprivileged, compared with its Air Age predecessor, in an aggressive counterforce attack upon the opponent's strategic missile force. Thus, in addition to the "loss of the defensive function," the strategist of the Missile Age is likely also to be concerned with "the loss of the *offensive* function as an inherent capability of our major offensive force," and the *dominance of the offensive*, which has so profoundly influenced strategy in the nuclear phase of the Air Age, is likely to be replaced by the *dominance of the deterrent* (which, of course, is not the same as a return to Clausewitz' day, when the defensive was "the stronger form



of war). The trend is already apparent. Whatever else is considered in deciding what missile systems to develop, the fact is not lost sight of that it is their primary function merely to exist. Already the rational priority in the case of missiles clearly lies not in assuring that they possess adequate power for offensive employment, but in making them secure. It may even turn out, in time, that active defense, of the anti-missile missile variety, has a better future than offensive counterforce. At least a good deal more uniformity in its targets (which are all basically objects plunging through the atmosphere) seems likely.

This elemental contrast between an air force, in its proper environment, and a strategic force based primarily on missiles, in its quite different environment, seems beyond debate. Obviously, in the case of the missile as in that of the manned bomber, there are many other things that must be considered before an adequate foundation for strategy has been built. But if we are to find a strategy for the Missile Age, it seems reasonable to begin our search with fundamentals, just as Bernard Brodie and other students of strategy have done for the Air Age. And if the fundamentals of missile power are different from those of airpower, it is not unreasonable to expect that there will be a corresponding difference in the strategy we judge appropriate.

It will be surprising if this suggestion is not greeted with incredulous protest by the adherents of the reigning school of strategic thought. It cannot be proved, it will be said, that the strategic force of the future will be unable to destroy its enemy counterpart in an offensive counterforce attack, and so long as there is a single iota of remaining *uncertainty*, we dare not assume the risk of accepting the dominance of the deterrent. In reply it may be pointed out that the dominance of the nuclear Air Age offensive could not be proved either. As it has never been tested, we do not know to this day (and we hope we shall never know) just what element of truth it contains. But we are talking about strategy, not geometry. Our premises need only be persuasive evaluations, not demonstrable proofs. In the airpower environment the dominance of the offensive has been considered the soundest guide to planning. Not to have acted upon it, in the minds of those making the decisions, would have meant taking certain avoidable risks of destruction in war. But the fact that it was acted upon did not mean that all risks were avoided. Indeed, this is one of Bernard Brodie's most telling points: the "best strategy" for *both* sides in the nuclear airpower environment is preventive war. One consequence of this is that precisely those military postures and moves that are most consistent with the best strategy—such as multiplying SAC's offensive power while leaving it

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Whatever else is considered in the future, the fact is not lost sight of that the strategic force must exist. Already the rational basis for strategy is not in assuring that they possess the capability for self-defense, but in making them dependent on active defense, of the anti-air defense, rather than offensive counterforce. The fact that the targets (which are all basically in the air) seems likely. The fact that the force, in its proper environment, is not on missiles, in its quite different environment. Obviously, in the case of the future, there are many other things that must be considered. The foundation for strategy has been laid for the Missile Age, it seems that the fundamentals, just as Bernard Brodie did for the Air Age. And the difference is different from those of airpower, that there will be a corresponding change in the appropriate.

It is not greeted with incredulous silence by the school of strategic thought. The strategic force of the future is not a part in an offensive counterforce, but a single iota of remaining uncertainty in the dominance of the future. It is not that the dominance of the future is proved either. As it has never been proved (and we hope we shall never prove it). But we are talking about the future, and only be persuasive evaluation of the power environment the dominance of the future is the soundest guide to planning. The minds of those making the future are in avoidable risks of destruction. It is upon did not mean that all the fundamentals of Bernard Brodie's most telling message in the nuclear airpower environment of this is that precisely the most consistent with the best of the future is to leave it

unprotected—are also those most likely to provoke the other side to preventive attack.

It perhaps should be added that to anticipate the change in the basic premise of our strategic thinking does not mean that we must leap to the conclusion that total war will become "impossible." Nor does it mean that we must adopt automatically any of the current theories of "minimum" or "finite" deterrence. Nor does counterforce become unimportant. In fact, the dominance of the deterrent, as the premise of strategy, will be tenable only on the condition that we recognize the inherent vulnerability of *any* strategic target that can be located and attacked in missile warfare, and that we exploit to the full the opportunity afforded us by the variety of dispersed, concealed, mobile, and protected deployments possible with missiles in order to minimize the risk of our deterrent weapons being successfully detected and destroyed. It should not be inferred from the dominance of the deterrent that this will be easy. The premise only asserts what may be reasonably assumed to be the result if both sides behave rationally. To relax and leave the future to our adversary would hardly be rational conduct in the circumstances. One important part of the effort required of us must be the attempt to develop counterforce measures that can penetrate the security of the various deterrent systems, for only by trying and failing can we gain reasonable assurance that the other side will also fail if it also tries. At the same time, we shall need to push relentlessly the search for an active anti-missile defense, for to permit our adversary a monopoly of achievement in this field would not be less disastrous.

There remains the strongly held conviction that the new premise cannot be accepted, regardless of its persuasiveness, for psychological reasons. We must not, it is said, encourage the natural complacency of the American people. Even more undesirable, according to some opinion, is the impact upon the morale of the military. We are reminded of the suggestion that morale considerations, rather than any real expectation of pulling it off, account for the concept of the "pre-emptive" strike in the military thinking of both the United States and the Russian air forces. It will always seem paradoxical to some people to insist we must run hard to hold our own. But at least there is no novelty in the idea that armed forces are developed and supported, not only to be used if needed, but also, and more importantly, so that the need will not arise. Nor are the military likely to be more frustrated by the effort to maintain forces that are frankly deterrent than they are now by the schizoid experience of counting on taking the initiative they know they are quite unlikely to be permitted to take.



It may be asked, however, as the effort required to maintain the security of the United States in the Missile Age seems likely to be no less burdensome than that called for in the past and at present, whether a national strategy built on the new premise is likely to be any different from that built on the old one. This is of course the question that requires examination by students of strategy. Superficially at least, it would appear almost certain that the change will have decided effects, not all of which will be favorable to our side. For example, in the Missile Age we can hardly expect to rely as heavily as we have done in the Air Age upon the threat of offensive strategic action in international crises—even to carry out our treaty obligations. By the same token the risks of total war arising out of peripheral crises may be considerably diminished, and this could mean that limited wars will not seem quite so futile as Bernard Brodie suggests they do today.

Meanwhile the problem of United States strategic security during the transitional stage into the Missile Age is being approached from an orientation that is fundamentally that of the Air Age. Long-range missiles carrying nuclear warheads are appraised mainly in terms of the unprecedented threat they offer to bombers sitting on their bases. Also the missiles themselves are thought of as targets for strategic attack in very much the same sense that the enemy's air bases are thought of. This is all very well as far as it goes. We do need security measures appropriate to the transition. We do need a strategy for the Missile Gap. But as we advance into the future, the question must be raised whether any strategy dominated by Air Age thinking is likely to serve.

It is equally important, however, not to forget that military strategy is a contingent art. To be sure, its claim is modest: it recognizes the limits imposed upon itself by the performance characteristics of weapons systems that exist or will exist when current developments have run their course (ignoring those that might have been created if other possibilities had been pressed). Thus military strategy freely admits its own transient character. Even so, the modest claim may be misleading. For what strategy actually reflects, often enough, is not the facts themselves but an accepted interpretation of the facts. If, for example, airpower developments had taken a different turning a decade or more ago, so that by 1957 intercontinental bombers had been given the capability of vertical take-off, or by some other means had been made free of vast soft bases, the premise of airpower strategy might have evaporated even before the strategic missile came on the scene. But the "dominance of the offensive" did not permit this turning, which ought

to suggest the possibility, if it is transient it may also be a strategist of the future, as in the past, by assuring him that it also alert his critics.



to suggest the possibility, among others, that while strategic thinking is transient it may also be tyrannous. The experience may comfort the strategist of the future, as no doubt it has consoled the strategist of the past, by assuring him that his speculations need not be futile. It should also alert his critics.

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